

### Abstract

Methods and devices for controlling multi-stage boiler systems. In one illustrative embodiment, the number of stages to be used is determined in a staging control sequence in response to a heating load, and in some cases, the individual stages  
5 are modulated to meet a heating load. In some embodiments, the staging control sequence may include observation of both heating load and the rate of change of the heating load. In another illustrative embodiment, the staging control observes compares a measured temperature to a setpoint and monitors changes in the measured temperature to make staging decisions. Various control methods are also provided to help achieve  
10 improved stability and efficiency, as desired.